AMENDMENTS TO THE SPECIFICATION

Please add the following new paragraph [0010.1] after paragraph [0010]:

[0010.1] Figure 1A is a simplified circuit schematic of the circuit schematic shown in Figure 1.

Please replace paragraph [0018] with the following rewritten paragraph:

[0018] Referring now to Figure 1, a schematic diagram of an embodiment according to the present invention is shown generally as circuit 10. Figure 1A shows a simplified schematic diagram of circuit 10. Circuit 10 includes several representative inputs including a power VCC input 11 and a control voltage VVCO input 12. A comparator 13 receives voltage VVCO input 12 and determines when additional current is to be supplied to a capacitor CT by operation of a switch 15. Switch 15 controls the switching between the two different frequency ranges available in the oscillator output by operation of various circuitry elements to control charging and discharging of capacitor CT. A comparator 14 is provided to control the shift between charging and discharging mode of capacitor CT. The threshold of comparator 14 is shifted between 0.5 volts and 5.2 volts, for example, to obtain an oscillator output with a rapid response.

Please replace paragraph [0025] with the following rewritten paragraph:

[0025] Referring now to Figure 2, a logic diagram of current charging control is illustrated generally as diagram 20. Diagram 20 represents the logical components of switch 15 illustrated in circuit 10 of ~~Figure~~ Figures 1 and 1A. Diagram 20 shows how the digital signals VG25 and VG250 are supplied to switches MP8 and MP2 to switch between different ranges of oscillator frequency output. In addition, the outputs provided by the logic circuit in diagram 20 control the slope of the charge on capacitor CT once the output of comparator 13 turns on, i.e., input OCOMP in diagram 20 goes high. The setpoint provided by reference voltage VVCO input 12 determines the switching point for the slope change as capacitor CT charges, and the selected frequency range determines how steep the slope will be. This relationship between setpoint and selected frequency range is illustrated and described in greater detail below.

Please replace paragraph [0026] with the following rewritten paragraph:

[0026] Discharging of capacitor CT is also controllable by modifying a current source IDT. Referring again to ~~Figure~~ Figures 1 and 1A, current source combination IDT and I25 constitute the current through which capacitor CT is discharged each period of the saw tooth oscillator frequency output. The discharge slope for the charge on capacitor CT is relatively steep with respect to the charging slopes, through the influence of the combination of IDT and I25. The discharge time for capacitor CT is chosen based on the application and should be sufficient for obtaining the maximum desired frequency in the selected range, as described in greater detail below.

Please replace paragraph [0028] with the following rewritten paragraph:

[0028] Referring for a moment to ~~Figure~~ Figures 1 and 1A, comparator 14 controls the shifting between charging and discharging modes of capacitor CT by varying the applied thresholds of the comparator inputs between 0.5 volts and 5.2 volts. For example, if a threshold voltage on comparator 14 is set to 5.2 volts, as the voltage on capacitor CT charges through 5.2 volts, the threshold on comparator 14 switches to 0.5 volts. This simple threshold switching scheme permits the output of comparator 14 to switch until the voltage on capacitor CT drops below 0.5 volts. Once capacitor CT has discharged through 0.5 volts, the threshold on comparator 14 is again switched to 5.2 volts to await the next charging cycle of capacitor CT. By using this arrangement, a simple and responsive oscillator switching scheme is achieved at the output of comparator 14 to provide a simple control, in several ranges, for oscillator frequency output.